



## Application Spotlight

### MTD Thrown Objects Lab

#### Application Spotlight Location:

MTD Products, Inc.  
Valley City, OH

#### Manufacture Rep:

Air Control Products  
Broadview Heights, OH

#### Contractor:

Gundlach Sheet Metal Works, Inc.  
Sandusky, OH

#### Details:

NORFI ALU250 Aluminum Extraction Rail – 16'

NORFI ALU250 Extraction MAXI Trolley with 8"  
Hose Connection

Tube Type Exhaust Extraction Arm with Custom  
Swivel Connection Flange – 13' x 8" Source  
Capture Arm

#### Summary:

Monoxivent teamed up with Air Control Products and Gundlach Sheet Metal Works, Inc. to provide and install an exhaust extraction system for MTD Products Thrown Objects Lab.





MTD conducts equipment testing in the Thrown Objects Lab. Lawn equipment is positioned in the center of the lab, the gasoline engine is turned on to full throttle, mower blades are engaged, and from beneath, ball bearings, nuts, bolts and nails are thrown into the whirling blades. MTD positions a cardboard wall around the lawn equipment, and measures how high above the floor, the thrown objects strike the cardboard wall.

In order to provide a solution for the exhaust extraction system, the following was taken into consideration. The engine exhaust hood could not be supported off of the floor. An overhead positioning rolling crane would prevent hanging the hood from the ceiling. Yet, the hood had to be able to be positioned on all sides of the room, based on the lawn equipment's exhaust discharge.



The solution, to suspend a jib crane off of a building column, allowing it to swing out of the way. The NORFI ALU250 Aluminum Extraction Rail was installed to the bottom of the jib crane. The NORFI Extraction MAXI Trolley was used to change the center point of the swing on the Tube Type Exhaust Extraction Arm with Custom Swivel Connection Flange. The inlet hood is an 8" tee, that can be rotated using a swivel joint.

#### **About MTD Products, Inc.:**

Founded in 1932, MTD Products Inc is a worldwide leader of outdoor power equipment headquartered in Valley City, near Cleveland, Ohio. Through our facilities in North America, Europe, Asia, and Australia, we produce quality mowers, snow throwers, utility vehicles, trimmers, tillers, and more for both residential and commercial markets. Our products can be found online and across the globe in all channels of distribution including, home improvement stores, hardware stores, mass retailers, independent dealers and farm supply stores.